

Notice of Allowability

Application No.

09/545,964

Examiner

Baoquoc N To

Applicant(s)

HIND ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 05/19/2004.
2. ☒ The allowed claim(s) is/are 1, 3-31.
3. ☒ The drawings filed on 10 April 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


JEAN M. CORRIELUS
PRIMARY EXAMINER

DETAILED ACTION

1. Claims 1, 3-31 are pending in this application.

Continued Prosecution Application

2. The request filed on 05/19/2004 for a Request For Continued Examination (RCE) under 37 CFR 1.53(d) based on parent Application No. 09/545964 is acceptable and a RCE has been established. An action on the RCE follows.

Allowable Subject Matter

3. Claims 1, 3-31 are allowed over prior art that made of record.

The following is an examiner's statement of reasons for allowance:

As to claims 1 and 18, none of the prior art of records alone or in combination neither teach or suggest "associating a first pair of synchronization parameters with each data records stored in the first and second databases, the first pair including a first synchronization parameter associated with the first database, and a second synchronization parameter associated with the first database, and a second synchronization parameter associated with the second database, the first pair of synchronization stored at the first database and wherein the first synchronization parameter is a host synchronization parameter and is indicative of a current version of the data recorded stored at the first database, and the second synchronization parameter is a communication device synchronization parameter and is indicative of a current version of the data record stored at the second database. In conjunction with

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other claimed limitations "updating a data record at the first database; incrementing the first synchronization parameter associated with the updated data record at the first database; transmitting a first update message from the first database to the second database, the first update message including the incremented first synchronization parameter, the second synchronization parameter, and the updating data records from the first database; updating the data stored at the second database using the information from the first update message."

As to claim 11, none of the prior art alone or in combination neither teach or suggest "wherein the first and second host synchronization parameters are indicative of versions of data records stored at the host system, and the first and second device synchronization parameters are indicative of versions of the records stored at the portable data communication device" in conjunction with other claimed limitations "associating a first device synchronization parameters and a first host synchronization parameter with each data record stored at the host system; associating a second device synchronization parameter and a second host synchronization parameter with each data record stored at the portable data communication device; if a data record is updated at the host system, then updating the first host synchronization parameter, and transmitting a first update message from the host system to the portable data communication device; and if a data record is updated at the device, then updating the second device synchronization parameter, and transmitting a second update message from the portable data communication device to the host system."

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As to claim 17, one of the prior art alone or in combination neither teach or suggest "wherein the first and second host synchronization parameters are indicative versions of data records stored at the host system, and the first and second device synchronization parameters are indicative of versions of records store at the portable data communication device" and in conjunction with other claimed limitations "designating the host system as the master and the portable data communication device as the slave; simultaneously updating a particular data record at both the host system and the portable data communication device; transmitting a first update message from the host system to the portable data communication device, the first update message including a first host synchronization parameter, a first device synchronization parameter associated with the updated data record stored at the host system, and the update data records stored at the host system; transmitting a second update message from the portable data communication device to the host system, the second update message including a second host synchronization parameter, a second device synchronization parameter associated with the updated data record stored at the portable communication device, and the updated data record stored at the portable data communication device; receiving the second update message a the host system, detecting a conflict has occurred for the particular data record, and ignoring the second update message; and receiving the first update message at the portable data communication device, detecting a conflict has occurred for the particular data record, and updating the data record at the portable data communication device using the information from the first update message."

As to claims 19 and 25, none of the known prior made of record alone or in combination neither teach or suggest "wherein each first synchronization parameters are indicative of versions of the data record stored at the host system, and each second synchronization parameters are indicative of versions of records stored at the portable data communication device" in conjunction with other claimed limitations "associating a pair of synchronization parameters with each data record stored in the host system, the pair including a first synchronization parameter associated with one of the host system, and a second synchronization parameter associated with the portable data communication device; associating two pairs of synchronization parameters with each data record stored in the portable data communication device, each pair including a first synchronization parameter associated with the host system, and a second synchronization parameter associated with the portable data communication device; updating a data record at one of the host system; incrementing the first synchronization parameter associated with the update record of the host system; transmitting a first update message from the one host system to the portable data communication device, the first update message including the incremented first synchronization parameter, and the second synchronization parameter, and the updated data record from the one host system; receiving the first update message at the portable data communication device; and updating the data record at the portable data communication device using the information from the first update message."

As to claim 27, none of the known prior art alone or in combination neither teach or suggest "wherein each first synchronization parameter is indicative version of the

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data records stored at the host system, and each second synchronization parameter is indicative of a version of the data record stored at the portable communication device” in conjunction with other claimed limitations “associating a pair of synchronization parameters with each data record stored in the host system, the pair including a first synchronization parameter associated with one of the host system, and a second synchronization parameters associated with the portable data communication device; associating two pairs of synchronization parameters with each of data record stored in the portable data communication device, each pair including a first synchronization parameter associated with one of the host system, and a second synchronization parameter associated with the portable data communication device; updating a data record at one of the host system; incrementing the first synchronization parameter associated with the updated data record at the one host system; and transmitting a first update message from the one host system to the portable data communication device, the first update message including the incremented first synchronization parameter, the second synchronization parameter, and the updated data record from the one host system.”

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent

Koslar et al. (US. Patent No. 6,466,609 B2). Patent date: 10/15/2002

Feague (US. Patent No. 6,247,135 B1) Patent date: 06/12/2001

Li et al. (US. Publication Number: 2003/0140050 A1). 07/24/2003

NPL

Ganeriwal et al. (Timing-Sync Protocol for Sensor Networks), Year-2003, ISBN: 1-58113-9, Pages 138-149.

Tyukin et a. (On the choice of coupling in a system of coupled maps: Structured implies features), Year-August 20-22, 2003, Volumes-2, Pages-555-562.

Panayiotopoulos (Unified Algebraic Treatment of Synchronization Parameters Estimation), Publication date: 06/11-14/2004, Volume-8, Pages 2530-2534.

Kanbara et al. (A Stereoscopic Video See-through Augmented Reality System Based on Real-time Vision -based Registration), Publication date: 03/18-22/2000, Pages-xx-302.

Contact Information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached at (703) 305-9790.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231.

The fax numbers for the organization where this application or proceeding is assigned are as follow:

(703) 872-9306 [Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II

2121 Crystal Drive

Arlington, VA 22202

Fourth Floor (Receptionist).

Baoquoc N. To

August 5, 2004



JERNAL CORRIELUS
PRIMARY EXAMINER